

# **MEETING SUMMARY**

## **CALFED BAY-DELTA PROGRAM FISH AND AQUATIC ECOSYSTEM ASSESSMENT PROCESS**

### **OCTOBER 17, 1996**

The October 17, 1996 working meeting was the third in a series of working meetings with agency and stakeholder fish experts. This meeting is part of an ongoing process to select assessment methods for fish and aquatic resources which are defensible and have broad support from both agency and stakeholder experts. The primary goal of the meeting was to agree on a process for selection of assessment methods.

### **ASSESSMENT VARIABLES**

The definition of "habitat" was discussed at length. It was suggested that the definition given for habitat is too broad and should be more specific. The definition of habitat should be expanded to include, geomorphology, depth, flow, and velocity. The structure and function of habitat should be included in the definition for the assessment variable. The definition of habitat will be revised to reflect this discussion.

The assessment variable list also needs to be linked more clearly to the species list. A discussion of this relationship will be added to the assessment variable discussion. This could be used as a tool for defining which methods are most appropriate for the different communities.

An important distinction was made between assessment variables associated with fish mortality and those associated with creating more fish. It was noted that there is not a clear distinction between some variables. Increasing fish populations versus mortality will be discussed in a preface to the assessment variables.

### **ECOSYSTEM COMMUNITIES**

The team agreed on the revised ecosystem community names. Concern was expressed that the elevation identified for the reservoir community may limit the analysis because some impacts might occur upstream of the reservoirs. The potential for additional impacts should be acknowledged but should be addressed in site-specific documents. The existing reservoir definition will be used in the programmatic analysis.

### **CONSTRAINTS FOR SELECTION OF ASSESSMENT METHODS**

Five constraints for the selection of assessment methods were discussed. These include measurability, accuracy and precision, importance, applicability, and verification. Participants

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felt that the selection process should not be as restrictive as was presented and should allow for the best use of available knowledge and professional judgement.

The use of quantitative models versus qualitative analysis was discussed. The weight of a narrative (i.e., qualitative) evaluation may be equivalent to that of quantitative, modeled results; one method is not necessarily better than the other. The team should determine if proposed models have long-term validity. Models should be evaluated for their ability to respond to changes in the Delta system and operational constraints. Data must also be the foundation for best professional judgement and credible narrative analyses. In determining what methods to use, the team must keep in mind the limitation of quantitative models and not hesitate to use professional judgement.

## DEVELOPMENT OF ASSESSMENT SCREENING PROCESS

The team developed a sequential screening process to evaluate potential assessment methods. This will allow the application of the constraints in a logical and consistent manner. The screening process incorporates an evaluation process, professional judgement and options to traditional assessment methods for important relationships which do not have an identified assessment process. The process was tested on two assessment methods during the meeting. Because of the complexity of the screening process it was recommended that when actually screening proposed assessment methods, smaller species based work groups actually screen the proposed tools.

## CONCLUSIONS

At the conclusion of the meeting, species, fish communities, assessment variables, and the need for constraints in the assessment methods selection process were generally agreed on. In addition, it was agreed that the following approach be used:

- 1) make the best possible use of both quantitative models and professional judgement;
- 2) once alternative refinement has been completed, have a large group meeting to discuss the alternatives and then break into smaller groups focused on specific fish communities for the purpose of screening proposed assessment methods; and
- 3) revisit the species list, assessment variables, and methods selection process when the alternatives are refined.

CALFED staff will submit a summary report that identifies the species list and matrix justifying the selection of species, describes the fish communities, includes a revised list of assessment variables, defines the constraints as discussed at today's meeting and shows the assessment methods selection process (flowchart). Participants will be asked to review and comment on this material.

## ATTENDEES AT OCTOBER 17, 1996 MEETING

Jim White - DFG  
Pete Rhoads - MWD  
David Kohlhorst - DFG  
Pete Chadwick - DFG  
Andrew Hamilton  
Sharon Kramer - MWD  
Rick Breitenbach - CALFED  
Joe Miyamoto - EBMUD  
Carl Mesick - SEWD consultant  
Dick Daniel - CALFED  
Phil Dunn - CALFED consultant

Ted Sommer - DWR  
Frank Wernette - DFG  
Steve Macaulay - SWC  
Charles Hanson - SWC consultant  
Lance Johnson - WWD  
Serge Birk - CVPWA  
Paul Bratovich - SWC consultant  
Jim Sutton - SWRCB  
Bruce Herbold - EPA  
Stephanie Theis - CALFED consultant  
Warren Shaul - CALFED consultant